

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER OF PATENTS AND TRADEMARKS Washington D.C. 20241 www.uspto.gov

DATE MAILED: 02/27/2003

| APPLICATION NO. | F | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-------------------------|---------|-------------|----------------------|---------------------|-----------------|
| 09:629,830 | | 07/31/2000 | Aldo P. Ferreira | 3673-4 | 5008 |
| 23117 | 7590 | 02/27/2003 | | | |
| NIXON & VANDERHYE, PC | | | | EXAMINER | |
| 1100 N GLE 8TH FLOOI | ₹ | | SANGHAVI, HEMANG | | |
| ARLINGTO | N, VA 2 | 22201-4714 | | ART UNIT | PAPER NUMBER |
| | | | | 2874 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | V), | | | |
|---|--|---|-------------|--|--|--|
| • | Applicati n No. | Applicant(s) | | | | |
| | 09/629,830 | FERREIRA ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Hemang Sanghavi | 2874 | | | | |
| The MAILING DATE of this communication app P riod for R ply | ars on the cover sheet | with the correspond nce address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | i6(a). In no event, however, may within the statutory minimum of t ill apply and will expire SIX (6) Micause the application to become | a reply be timely filed iirty (30) days will be considered timely. DNTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133). | | | | |
| 1) Responsive to communication(s) filed on <u>05 F</u> | ebruary 2003 . | | | | | |
| 2a) This action is FINAL . 2b) ⊠ Thi | s action is non-final. | | | | | |
| 3) Since this application is in condition for allowa closed in accordance with the practice under <i>t</i> | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) <u>1-20</u> is/are pending in the application | | | | | | |
| 4a) Of the above claim(s) 12 and 13 is/are without | drawn from consideration | n. | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6) Claim(s) <u>1-11 and 14-20</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or Application Papers | election requirement. | | | | | |
| 9) The specification is objected to by the Examiner | | | | | | |
| 10) The drawing(s) filed on is/are: a) accep | | the Evaminer | | | | |
| Applicant may not request that any objection to the | | | | | | |
| 11) The proposed drawing correction filed on | - · · · | | | | | |
| If approved, corrected drawings are required in rep | | ., | | | | |
| 12) The oath or declaration is objected to by the Exa | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign | priority under 35 U.S.C | . § 119(a)-(d) or (f). | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | • | | | | | |
| 1. Certified copies of the priority documents | have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| Copies of the certified copies of the prior application from the International Bur See the attached detailed Office action for a list of the certified copies of the prior application. | eau (PCT Rule 17.2(a)) | | | | | |
| 14) Acknowledgment is made of a claim for domestic | · | | n). | | | |
| a) The translation of the foreign language pro- | visional application has | been received. | , | | | |
| 15) Acknowledgment is made of a claim for domestic Attachment(s) | o priority under 35 0.5.0 | 2. 33 120 and/01 121. | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. | 5) Notice of | v Summary (PTO-413) Paper No(s) f Informal Patent Application (PTO-152) | | | | |

Art Unit: 2874

DETAILED ACTION

Election/Restrictions

Applicant's election of the Group I invention (claims 1-11 and 14-20) in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 and 14-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In lines 2-3 of claim 1, "the application of the evanescent field" lacks antecedent basis. Similarly, in line 5 of claim 1, "the evanescent field" lacks antecedent basis, since the evanescent field is not an inherent property of the optical fiber.

In line 6 of claim 1, the phrase "using an appropriate technique based on physical chemical properties" renders the scope of the claim unascertainable.

Art Unit: 2874

In line 8 of claim 1, there is no antecedent basis for the term "the immediate contact".

In line 9 of claim 1, "the sample" lacks antecedent basis.

In line 16 of claim 1, the phrase "an appropriate method" renders the scope of the claim unascertainable, since it is unclear as to what constitutes "the appropriate method".

In lines 1-2 of claims 4 and 5, "the time of the treatment" lacks antecedent basis.

In line 3 of claim 4, "the sheath" lacks antecedent basis.

In line 4 of claim 4, "the core" lacks antecedent basis.

In line 1 of claim 6, "the sample" lacks antecedent basis.

In line 3 of claim 6, "the culture medium" lacks antecedent basis.

In claim 9, "the contact" and "the medium" lack antecedent basis.

In lines 1-2 of claim 11, "the monitoring of the environment" lacks antecedent basis.

In claim 14, "the 2x1 type" and "2x2 type" lack antecedent basis.

In lines 15 and 19 of claim 14, "the photodetector" lacks antecedent basis.

In claim 15, "the 2x1 type" and "the 2x2 type" lack antecedent basis.

In lines 18 and 22 of claim 15, "the photodetector" lacks antecedent basis.

In lines 25-26 of claim 15, "the Fabry-Perot type interferometer" lacks antecedent basis.

In claim 16, "the 2x1 type" and "the 2x2 type" lack antecedent basis.

In lines 19 and 21 of claim 16, "the photodetector" lacks antecedent basis.

Art Unit: 2874

In lines 23-24 of claim 16, there is no antecedent basis for "the Michelson type interferometer".

In claim 17, "the 2x1 type" and "the 2x2 type" lack antecedent basis.

In lines 20 and 26 of claim 17, "the photodetector" lacks antecedent basis.

In line 28 of claim 17, "the Mach-Zehnder type interferometer" lacks antecedent basis.

Applicant is requested to clearly define similar elements (i.e., a first fiber, a second fiber, a first photodetector, a second photodetector) and maintain the essential structural cooperative relationships of elements in the claims.

Claims 2-3, 7-8, 10, and 18-20 are necessarily rejected, since these claims directly or indirectly depend upon the rejected base claims and include the same deficiency.

Allowable Subject Matter

Claims 1-11 and 14-20 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Eden, Shimakita et al, Grow, and Mitchell disclose different methods for detecting microorganisms using an optical fiber or an optical waveguide.

The prior art submitted by applicant has been considered. See attached copy of form PTO-1449.

Art Unit: 2874

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hemang Sanghavi whose telephone number is 703-305-3484. The examiner can normally be reached on Monday-Thursday (8:30 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 703-308-4819. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Hemang Sanghavi Primary Examiner Art Unit 2874

hs February 23, 2003